

Appln. Serial No. 10/799,963
Reply to Office Action Mailed July 26, 2007

REMARKS

In the Office Action dated July 26, 2007, claims 1-12 and 20-25 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 7,068,683 (Lundby) in view of U.S. Patent No. 7,155,236 (Chen); claims 13, 14, and 17-19 were rejected under § 103 over Lundby in view of U.S. Patent No. 6,252,898 (Eto); and claims 15 and 16 were rejected under § 103 over Lundby in view of Eto and Chen.

With respect to independent claim 1, the Office Action repeated the same rejection raised in the previous Office Action. It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 1 over Lundby and Chen for at least the following reasons: (1) no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Lundby and Chen to achieve the claimed invention (*see KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007)); and (2) the hypothetical combination of Lundby and Chen does not disclose or hint at all elements of claim 1.

Claim 1 recites a method for use in a wireless communications network that includes communicating data with plural mobile stations over a wireless link, and sending a broadcast message to the plural mobile stations, where the broadcast message contains an indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions over a reverse wireless link.

The Office Action cited column 8 of Lundby as disclosing the use of a broadcast message. 7/26/1007 Office Action at 4. Also, the Office Action referred to Fig. 11 in Lundby, and specifically steps 122-134 of Fig. 11, which describes a procedure in which a mobile station and base station negotiate for determining a data rate for traffic over the forward wireless link. As conceded by the Office Action, Lundby does not disclose the sending of a broadcast message to plural mobile stations, where the broadcast message contains an indication for indicating to the plural mobile stations that the mobile stations *are to change data rates for transmissions over a reverse wireless link*. *Id.* However, the Office Action cited Chen as disclosing the claimed subject matter missing from Lundby. *Id.*

There are several points of errors made in the obviousness rejection. The first point of error is that although column 8 of Lundby does refer to using a broadcast message, it is noted that the broadcast message does *not* contain an indication for indicating that mobile stations are

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to change data rates. It appears that the Office Action is asserting that the broadcast message sent in Lundby contains an indication that mobile stations are to change data rates on the forward link. That is clearly not the case, and is established by the Fig. 11 process flow of Lundby. In the Fig. 11 process flow, it is noted that the base station and each mobile station have to individually negotiate the data rates to be used for the forward link. Note that in column 10 of Lundby, reference is made to the base station transmitting a data rate indicator to each mobile station in step 134 of Fig. 11. This data rate indicator comes right after the sentence that states that the base station "determines corresponding *data rates* for each mobile user." Lundby, 10:9-11 (emphasis added). Since there are plural data rates for the plural mobile stations, it is clear that the data rate indicator transmitted at step 134 of Fig. 11 cannot be transmitted in a broadcast message. Therefore, the assertion in the Office Action that the base station sends a broadcast message to indicate to multiple mobile stations that data rates of the mobile stations are to be changed is incorrect.

The Response to Arguments section of the Office Action further cited column 1, line 65-column 2, line 10, of Lundby, which refers to a first embodiment in which a base station transmits packet data to one mobile user at a time, and to a second, alternate embodiment in which packet data is transmitted to multiple mobile users at a time, with the available power divided among multiple users. Lundby, 1:65-2:6. Based on this passage of Lundby, the Office Action made the following conclusion: "hence indicating to the mobile stations a transmission rate change inherent in the transmission power to data transmission ratio." 7/26/2007 Office Action 3. The Office Action's conclusion is erroneous, as the cited passage in columns 1 and 2 of Lundby does not provide any hint of "sending a broadcast message to the plural mobile stations, the broadcast message containing an indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions over a reverse wireless link." As established above, since there are plural data rates for the plural mobile stations in Lundby, it is clear that the data rate indicator transmitted at step 134 of Fig. 11 of Lundby cannot be transmitted in a broadcast message.

For at least this reason, it is clear that the obviousness rejection of claim 1 is defective.

The second point of error made by the Office Action is that Chen does not disclose the claimed subject matter that is missing from Lundby. The Office Action asserted that Chen "discloses mobile station transmission on the reverse link," citing specifically to column 2, lines

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25-32, and column 2, line 67-column 3, line 6, of Chen. 7/26/2007 Office Action at 4. The cited passages of Chen refer to the mobile station needing varying amounts of transmission power for transmitting data on the reverse link, and providing efficient utilization of the reverse link capacity. However, nowhere in the cited passages of Chen, or anywhere else in Chen, is there any hint of sending a broadcast message to plural mobile stations, where the broadcast message contains an indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmission over a reverse wireless link. As conceded by the Office Action, this claimed subject matter is also not in Lundby. Therefore, it is clear that the hypothetical combination of Lundby and Chen does not teach or hint at all elements of claim 1, contrary to the assertion made by the Office Action.

A third point of error made by the Office Action is the assertion by the Office Action that a person of ordinary skill in the art would have been prompted to combine the teachings of Lundby and Chen to achieve the claimed subject matter. Lundby describes negotiation between a base station and each mobile station in which the base station is able to determine data rates for respective mobile stations, and to individually transmit a data rate indicator to each of the mobile stations so that the mobile stations know what data rate traffic is to be received on the forward wireless link. There is no hint anywhere within Lundby, nor in Chen, of modifying this procedure to provide for a broadcast message that is sent to plural mobile stations to indicate to the plural mobile stations that they are to change data rates for transmission over a reverse wireless link.

Therefore, since no reason existed to combine the teachings of Lundby and Chen to achieve the claimed invention, it is respectfully submitted that the obviousness rejection of claim 1 is defective for this additional reason.

Independent claim 20 is allowable over Lundby and Chen for similar reasons as claim 1.

Independent claim 13 was rejected as being obvious over Lundby in view of Eto. A *prima facie* case of obviousness has not been established with respect to claim 13 for at least the following reasons: (1) no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Lundby and Eto; and (2) the hypothetical combination of Lundby and Eto does not disclose or hint at all elements of claim 13.

Claim 13 recites sending a broadcast message to the plural mobile stations, where the broadcast message contains an identifier, the identifier set to a first value to uniquely identify one

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of the plural mobile stations, and the identifier set to a predetermined value to provide a broadcast indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions over a reverse wireless link.

The Office Action stated that the "reverse wireless link" of claim 13 is "read on *mobile station transmitting to the base station* – see col. 9 lines 41-45, col. 10 lines 9-12, fig. 11 step 34" 7/26/2007 Office Action at 6. Lundby clearly does not disclose providing any type of indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions over a *reverse* wireless link. The data rate indicator that is transmitted to each mobile station at step 134 of Fig. 11 of Lundby refers to the data rate in the *forward* wireless link. Specifically, Lundby states that "[p]rocessing then continues to step 144 and the mobile receives traffic at the data rate" Lundby, 10:12-14. In view of this erroneous application of Lundby to the claim language, the obviousness rejection of claim 13 over Lundby and Eto is clearly defective.

Moreover, as discussed above in connection with claim 1, Lundby clearly does not disclose sending a *broadcast* message to plural mobile stations, where the broadcast message has an identifier set to a predetermined value to provide a broadcast indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions over a reverse wireless link. As noted above, Lundby discloses that multiple indicators are sent to multiple corresponding mobile stations; therefore, there is clearly no hint given in Lundby of sending a broadcast message in the manner recited in claim 13. Based at least on this additional point of error made in the Office Action, the obviousness rejection is defective.

Moreover, Eto clearly does not disclose or hint at the claimed subject matter that is missing from Lundby. The Office Action cited the Abstract and column 2, lines 59-67, and column 3, lines 16-21, of Eto, where the cited passages refer to a first station receiving a parameter indicative of a C/N (carrier-to-noise) value of a received signal, and if the measured C/N value presents a change equal to or larger than a predetermined value, the data rate of a signal to be transmitted from another station is changed. However, there is absolutely no hint in Eto of sending a broadcast message that contains the identifier set to a predetermined value to provide a broadcast indication for indicating to the plural mobile stations that the mobile stations are to change data rates for transmissions over a reverse wireless link.

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Therefore, even if Lundby and Eto can be properly combined, their hypothetical combination clearly does not disclose or hint at all elements of claim 13.

Moreover, no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Lundby and Eto to achieve the claimed subject matter. As explained above, there clearly existed no hint of using a broadcast message that contains the identifier set to the predetermined value of claim 13. The only apparent basis for combining Lundby and Eto to achieve the claimed invention is impermissible hindsight based on the teachings of the present invention. Without the benefit of the teachings of the present invention, a person of ordinary skill in the art looking to the teachings of Lundby and Eto would not have been prompted to modify Lundby and Eto to achieve the use of a broadcast message containing the identifier set to the predetermined value that is recited in claim 13.

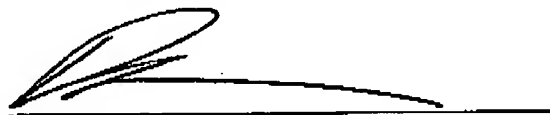
In view of the foregoing, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 13.

Dependent claims are allowable for at least the same reasons as corresponding independent claims.

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0121US).

Respectfully submitted,

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